(c) The j/φ alternation.

In a number of environments, a j is lost. These include the environment after long vowels at the end of polysyllabic words, e.g., mazgāi + a > (i/j) mazgāj + a > (V/φ) mazgāj > (j/φ) mazgā 'he washes'; as well as the environment after a palatal (the latter generated by the previous rule): naz + iai > (i/j) naz + jai > (met.) naz + jia > (V/φ) naz + ji > (palat.) naž + ji > (j/φ) naži 'knives'.

It is not clear whether the j/φ loss is connected with the loss of other segments, e.g., d before n: brænd + n + a > (n/i) bræid + n + a > (æ/e) breid + n + a > (met.) bried + n + a (V/φ) bried + n > (d/φ) brien 'he wades'.

(d) Assimilation in voicing.

Obstruent clusters are subject to a regressive assimilation in voicing, e.g., zirg + a + s > (V/φ) zirg + s > (assim.) zirks 'horse'. This assimilation must follow j-loss: mædi + a + s > (i/j) mædj + a + s > (æ/e) medj + a + s > (V/φ) medj + s > (t/s) mezj + s > (palat.) mežj + š > (j/φ) mežš > (voicing) mešš 'forest'.

<div align="right">M. Halle, V. J. Zeps</div>

B. ON THE METRICS OF PRE-ISLAMIC ARABIC POETRY

The purpose of the following note is to give wider currency to certain facts of great linguistic interest which because of the present somewhat artificial organization of scholarly publication are likely to escape the attention of all but a very small number of linguists. The note is based on G. Weil's article ᶜArūḍ in the Encyclopedia of Islam, I (Leiden, 1960), pp. 667-677.

The term ᶜarūḍ is used by the native Arab grammarians to designate the "science of the rules by means of which one distinguishes correct metres from faulty ones in ancient (pre-Islamic – M. H.) poetry." (667). In line with this conception of the primary objectives of the science of prosody, the ancient grammarians distinguished between uṣūl, which refers to the abstract underlying patterns, and furūᶜ, which refers to the set of verse types by means of which the abstract patterns may be actualized. If this distinction were to be applied in the study of English prosody, basic verse patterns such as "iambic pentameter" or "trochaic dimeter" would belong to uṣūl, whereas the rules for actualizing the iambic pentameter – e.g., the list of the "allowable deviations from the basic iambic pentameter" – would belong to the furūᶜ.

In the present note we restrict our attention to the rules that establish the 16 uṣūl patterns recognized by the native prosodists.

Rule 1. The verse line is composed of two identical hemistichs (miṣrāᶜ pl. maṣāriᶜ).[1]

Rule 2.   A hemistich contains either three or four pegs (watid pl. awtad).

Rule 3.   In a given hemistich each peg is preceded by the same number of cord units (sabab pl. asbab). This number may vary between one and three.

Rule 4.   In hemistichs with four pegs no more than two cord units are admitted before a peg.

Rule 5.   In hemistichs with three pegs, no less than two cord units must precede each peg.

If we represent a peg by P and a cord unit by C, we obtain from rules 2-5 the following four abstract patterns, which we designate here by the numerals with which they are labelled in the Arab treatises:

(1)

CPCPCPCP	V
CCPCCPCCPCCP	I
CCPCCPCCP	III
CCCPCCCPCCCP	II

Rule 6.   A peg is composed of a weak position and strong position.

In a regular line of verse the weak position is occupied by a short unstressed syllable and the strong position is occupied by a long stressed syllable. When the weak position precedes the strong position we have an iambic peg (watid majmūᶜ); when the strong position precedes the weak position, we have a trochaic peg (watid mafrūk). The occurrence of trochaic pegs is severely restricted (see rule 7 below).

A cord unit is normally occupied by a single syllable whose quantity and stress are apparently free.

Rule 7.   In three-peg hemistichs with two intervening cord units (pattern III in (1)) the last peg may be either iambic or trochaic; otherwise trochaic pegs are not admitted, and only iambic pegs are found.

Thus, if we assume that P in (1) stands for an iambic peg, and let Q stand for a trochaic peg, we may think of rule 7 as adding a fifth pattern to the four cited m (1):

(2)   CCPCCPCCQ   (IV)

Rule 8.   Subject to the restrictions below (see rules 9-11) the set of admissible hemistichs is given by the strings formed by cyclical permutation from the five patterns in (1) and (2).

Rule 8 expresses the main constitutive principle of Arabic Verse. The founder of Arabic prosody, the eighth century scholar, Al-Xalīl, expressed this fact by representing the five patterns in (1) and (2) as circles. Thus, for instance, pattern V of (1) above was represented by Al-Xalīl in a form that is essentially equivalent to (3)

(3)
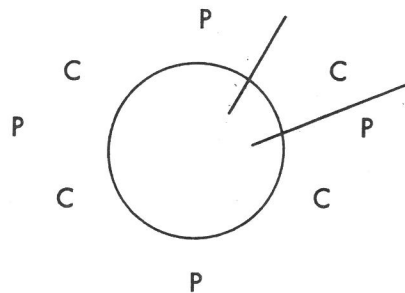
where the two lines intersecting the circle indicate the two possible terminal points of the hemistich. In view of this the five basic patterns of (1) and (2) are referred to traditionally as circles. This term will also be utilized below.

Assuming that the metrical entities are to be read in clockwise order, (3) can be taken as representing the two hemistichs which Al-Xalīl designated as

(4)   mutadārik   CPCPCPCP

       mutak̲ārib   PCPCPCPC

It is obvious that from the pattern of circle V the strings in (4) are the only ones that can be generated by cyclical permutation. From the pattern of circle III in (1) three distinct strings can be generated (as before the names on the left are those used by Al-Xalīl):

(5)   rajǎz   CCPCCPCCP

       hazǎj   PCCPCCPCC

       ramal   CPCCPCCPC

Similarly, from the pattern of circle I in (1) only three distinct strings can be generated:

(6)   CCPCCPCCPCCP
       PCCPCCPCCPCC
       CPCCPCCPCCPC

These, however, are subject to a special adjustment rule:

Rule 9.   In hemistichs of the first circle delete the cord unit following even numbered pegs, if the line begins with the sequence CP; otherwise, delete the cord unit following odd numbered pegs.

Rule 9 yields then the three attested strings of circle (I):

(7)   basīṭ   CCPCPCCPCP

       ṭawīl   PCPCCPCPCC

       madīd   CPCCPCPCCP

Rule 10. A sequence of three cord units functions in the permutation as a single unit.

Rule 10 accounts for the fact that in circle II of (1) only two strings are generated:

(8)   k$\bar{\text{a}}$mil   CCCPCCCPCCP

         w$\bar{\text{a}}$fir   PCCCPCCCPCCC

Rule 11a. A trochaic peg cannot begin a hemistich.

Rule 11b. A hemistich may not end in a trochaic peg followed by one or more cord units.

These two rules affect only strings in circle IV. Rule 11a excludes the string

   QCCPCCPCC

Rule 11b excludes the strings

   PCCPCCQCC

   CPCCPCCQC

The remaining six strings that may be generated by cyclical permutation from circle IV are all admissible:

(9)   sari$^{\bar{\text{$\,$}}\text{c}}$ CCPCCPCCQ

         mu$\overset{\vee}{\text{j}}$ta$\Theta\Theta$ CQCCPCCPC

         mu$\underset{.}{\text{k}}$tada$\underset{.}{\text{b}}$ CCQCCPCCP

         mu$\underset{.}{\text{d}}$$\bar{\text{a}}ri^\text{c}$ PCCQCCPCC

         xaf$\bar{\text{i}}$f   CPCCQCCPC

         munsari$\underset{.}{\text{h}}$ CCPCCQCCP

It must be noted that rules 9, 10, 11 have a rather unmotivated appearance in the form in which they are given above. This suggests that something essential has been missed here.

The preceding discussion differs from the traditional treatment in that it dispenses with the entities foot (j$\overset{\vee}{\bar{\text{u}}}z^\text{c}$) and mora, which play a prominent role in the traditional discussions. We have found no use for these entities in our description, and at the present state of our understanding we are inclined to believe that these entities appear in the traditional discussions because of certain features of the symbolic apparatus that is utilized in the traditional discussion, rather than because of properties of the subject matter.

                                                                M. Halle

Footnote

1. This term is reminiscent of the Germanic "stave".